Museum of Zoology of the University of São Paulo: adapting to changing times

MARIA ISABEL LANDIM

Introduction

HE MUSEUM of Zoology of the University of São Paulo (*Museu de Zoologia da Universidade de São Paulo* - MZUSP) dates back to a few centuries: it combines the eclectic collection of Joaquim Sertório's private museum with a smaller collection of a certain Mr. Pessanha, and the collection of the Provincial Museum created and opened in 1877 by the Progress Aid Society of the Province of São Paulo. Together, these collections made up the core of what in 1891, in São Paulo, was named State Museum.

After acquiring the collection of the Sertório Museum, Counselor Francisco de Paula Mayrink donated it to the state of São Paulo, which in incorporated the collection to the Provincial Museum. The State Museum was open from 1891 to 1893 under the direction of the Swedish Alberto Löefgrenede, who had previously worked for Joaquim Sertório, helping him to organize his museum. In 1893 this collection, with an expressive representation of the various areas of Natural History was placed under the responsibility of the Geographical and Geological Commission of São Paulo and the coordination of Orville Adelbert Derby, with the name of Paulista Museum. In 1894, then separated from the Commission, it was transferred to the independence monument building in Ipiranga. Considering the late nineteenth century alone, this collection was assembled under different institutions, foreshadowing the history of institutional upheavals that marked its history.

The creation of museums in Brazil in the nineteenth century followed the trend of expansion outside the Europe-United States axis and was associated with the European movement for the creation of colonial museums and exploitation of flora and fauna from overseas, and of decentralization of knowledge production. The museums created "outside the axis" maintained strong ties with Europe and the United States, which was reflected even in the choice of their directors and in the presence of large numbers of foreigners in their staff (Sheets-Pyenson, 1988).

In their origin, Brazilian museums, despite housing eclectic collections, were focused on the knowledge of the various areas of Natural History in Brazil,

and the presence of a zoologist director (1893-1916) in the Paulista Museum gave the institution an eminently naturalist character. What was seen next was the specialization of knowledge areas, stimulated also by the creation of museums and, consequently, by their increasingly larger collections. Natural History, however, which had driven the project of institutionalization of knowledge production in our country, did not receive the same attention from leaders during the various periods that have brought us to the present days.

Paulista Museum (Natural History)

The origin of the Paulista Museum, one of the first Brazilian museums, is linked to the creation of the Royal Museum (later the National Museum of Rio de Janeiro) in 1818, which provided for the creation of a network of provincial museums that would be connected to the Metropolitan Museum, with a mission and a strategy related to the propagation of Natural Sciences in Brazil. From this perspective, important museums also emerged in our country, such as the Museum of Pará (Emílio Goeldi) in 1871, in Belém, the Museum of Paraná in 1876, in Curitiba, and the Botanical Museum of Amazons, in 1883. The link to the National Museum stemmed from the appointment of the first director of the Paulista Museum, German zoologist Herman von Ihering, who had worked for the National Museum as a traveling naturalist (Lopes, 1997).

In São Paulo, the Paulista Museum, which originates from collections aimed at documenting wildlife in the surroundings of the city, such as the Sertório Museum (Brandão & Samara, 2005), would make an important contribution to the consolidation of research in different areas of knowledge in the prosperous state of São Paulo in the late nineteenth and early twentieth centuries.

Herman von Ihering was committed to the vision, then in vogue, of specialization in various fields of science. He even advocated the idea of creating an exclusive shellfish museum (his study group), arguing that this was the way to broaden knowledge in several areas. In fact, with no direct involvement in teaching, the institutionalization of research in our country, in the museums, offered their staff the opportunity for and commitment to full time work (Lopes & Figueirôa, 2002-2003). As a result these employees ended up involved in the various stages of the curatorial process (sensu Brandão Landim, in press). We then gradually witnessed the training of local professionals who would ensure continuity to the process of institutionalizing scientific research and curatorship in our country.

Ihering had solid connections to the network of museums and international knowledge production. His concern with the production and dissemination of knowledge resulted in the publication of the *Journal of the Paulista Museum*, to disseminate the new field that was being institutionalized. Thus, he included the Paulista Museum in the international network of knowledge and material exchange, always seeking to stay current in his practices in the areas of science and museums.

The separation of the Paulista Museum collection started only after the

end Ihering's administration. The specialization process experienced by the eclectic collection of the Paulista Museum under the direction of the historian Affonso d'Éscrangnolle Taunay (1917-1925) illustrates a period of decline in the status of Natural History in the São Paulo institution. For different reasons, this was also observed in other countries. In São Paulo, the various collections of the Paulista Museum referring to different areas of Natural History (botany, mineralogy, zoology, archeology and ethnology) followed their own paths in more focused institutions such as the Biological Institute, the Institute of Geosciences, the Museum of Zoology and the Museum of Archeology and Ethnology, the last three currently under the auspices of the University of São Paulo. This division partly explains the lack of a Natural History Museum in São Paulo today.

In London, in the mid-nineteenth century, in the process of professionalizing research in Natural History, the collections of the British Museum of Natural History became enormous and out of tune with the rest of museum's collection. For this reason, the anatomist Richard Owen, head of the Museum's Department of Natural History, launched a campaign for the creation of a new building to house these collections. The new building, located in South Kensington, was opened in 1881 (Stearn, 1998), with the name of British Museum (Natural History). A "temple" for Natural History thus emerged in London (with a certain degree of interdisciplinarity), with a conservative architectural design and a new museographic approach sharing the same space.

Contrary to what the founder of the British Museum (Natural History), Richard Owen, had envisioned, a new exhibition model following the new trend of the time was put into practice. Owen's original plan for his "cathedral" was to exhibit each and every item of the museum's collections, so as to give the exact dimension of the power of the British Empire (Sheets-Pyenson, 1988, p.7; Stearn, 1998, p.75; Yanni, 2005, p.111). His opponents, focused on increasing professionalization among naturalists, argued that only a few animals of interest to the public should be displayed. Thus, most of the collections were kept as technical reserves. These "scientific" collections were available to researchers for studies. This curatorial policy of dividing the collections into scientific and didactic or museographic was also defended by the zoologist George Brown Goode, director of the National Museum of the United States - Smithsonian Institution (Alves, 2001, p.82). Ihering and Goode were peers and this currently pragmatic approach was applied here as well.

Today, following this tradition, even where the exhibits display scientific materials from the museums' collections, it is not uncommon to see replicas and models in their galleries. So, rare, fragile items, or of great scientific value are kept hidden from the public eye. The items displayed must articulate narratives in exhibits that no longer work as sticker albums of a microcosm to be rebuilt. This tension between preserving rare items and information for the future and sharing them with the public illustrates the institutional paradox typical of museums (Brandão & Landim, in press).

The specific case of the Museum of Zoology of the University of São Paulo is a vivid example of the dynamic process of the development of biodiversity research in Brazil. Mimicking the model of the National Museum, Ihering hired many foreigners as naturalists to conduct collecting expeditions aimed at expanding the museum's collections (Menezes et al., 1997). Under his direction, the biological collections of the Paulista Museum grew disproportionately to other collections. Even today, the oldest records that can be identified of the items in our collections refer to that period, which is responsible for the first significant systematic effort to collect material. Most of the galleries of the Paulista Museum exhibited Natural History materials (Lopes, 1997). Only later, with the appointment of Affonso d'Éscrangnolle Taunay as director, the institutional focus switched to the vocation of the building that is the monument of the independence of Brazil and its historical collection.

In this process, a Zoology section was created within the Paulista Museum in 1925, followed by a Department of Zoology linked to the Secretariat of Agriculture, Industry and Trade of São Paulo, in 1935 (Figure 1). The current building of the Museum of Zoology began to be built in 1939 to house the large zoological collection of the Paulista Museum. The commitment to research and public education from the collection, which is provided for in the decree creating the Paulista Museum, was maintained throughout that period. With a design by Cristiano Stokler das Neves, the first building was built in São Paulo for the purpose of housing a museum: a museum of zoology (Silva, 2006; Neves Neto, 2008, p.87). In 1941 the zoological collections were transferred to the new building. Although even for that time the design was a bit undersized for the zoology collections and research of the then Department of Zoology, the building still houses, despite all its limitations, one of the largest and most important collections of Neotropical fauna in the world (Figure 1).

University Museum (Zoology)

The close relationship between the museum and the University of São Paulo, founded in 1934, is old, and the idea of incorporating a Museum of Natural History to the School of Philosophy, Sciences and Letters had already emerged back in 1936 (Silva, 2006) in Taunay's annual report of activities. The Paulista Museum itself was already considered a complementary unit to USP since 1934 (Decree No. 6283 - creation of USP, of January 25, 1934, Art. 4). Under the direction of Olivério Mário de Oliveira Pinto, this had been a recurring idea since 1939. But it was only in 1969, under the direction of Paulo Emílio Vanzolini, that the Museum of Zoology was incorporated into the University.

Like all Research Institutes that emerged at the time, the focus of the Department of Zoology was on research. It also included public education through an exhibit that followed the classical models of taxonomic classification of the specimens displayed according to kinship, since Ihering, by contemplating the contributions of Carl Linnaeus and Charles Darwin to the biological sciences.

With Paulo Emílio Vanzolini as its director (1962-1992), the Museum of Zoology was definitely integrated into the international scene, and research in that institution was in tune with the new methodologies then in vogue. Moreover, its inclusion in the university enabled the researchers-professors from the MZUSP to engage in postgraduate courses and in the formal education of a new generation of systematists and taxonomists that began to be formed through research of the Museum collections. The separation of Zoology from the Paulista Museum also resulted in the publication of the journals Arquivos de Zoologia do Estado de São Paulo (Zoology Archives of the State of São Paulo), currently Arquivos de Zoologia (Zoology Archives) in 1940, and Papéis Avulsos do Departamento de Zoologia (Independent Papers of Department of Zoology), currently Papéis Avulsos de Zoologia (Independent Zoology Papers), of the Secretariat of Agriculture of São Paulo, in 1941. The institutional focus on research enabled the MZUSP to become a reference in the production of knowledge in biodiversity. Furthermore, it ensured the exponential increase of its collections, put together through major research projects in strategic areas inside and outside the Brazilian territory. Collective efforts within the institution (as in the Permanent Expedition to the Amazon Region funded by Fapesp) led to a significant increase in the MZUSP collection. Looking outwards, the research conducted by the Museum of Zoology gained momentum in the twenty-first century. All this expansion of scientific activity occurred despite the sharp decline in the number of faculty-researchers which, in 2001, reached its minimum limit of eight professors against the former 24 in the defunct Zoology section of the Paulista Museum.

As the heir of Herman von Ihering, the MZUSP delivered on the promise to establish itself as a research institution, putting together one of the most important collections of Neotropical fauna in the world.1 Unlike it, we faced the urgent task of generating information on the biological diversity of our megadiverse country2 vis-à-vis the accelerated economic development and the consequent loss of natural landscapes and species. The current extinction of species induced by human action on the planet reaches alarming rates. Designing measures to mitigate the environmental impact of the projects underway in our country (provision of service that is in the range of activities undertaken by the MZUSP) requires becoming acquainted with our biodiversity. Generating basic information and providing comparative material is a vital part of our mission. The visionary studies of the first naturalistic studies in our country laid the ground for the construction of a long research tradition that puts us in a key position in the global scenario. A series of national policies to encourage research in our area sponsored by CNPq makes Brazil a center of taxonomic studies. Still, we do not have the number of professionals needed to carry out the review studies of important groups (Marques & Lamas, 2006). The very generation of taxonomic knowledge requires lengthy comparative analyses of materials by researchers (Landim & Hingst-Zaher, 2010). This deficit scenario has been dubbed "taxonomic impediment".





Figure 1 - (Below) Herpetology Collection of the Department of Zoology in 1946 (MZUSP archives: author unknown). (Above) Ornithology Collection of the MZUSP in 2010. The largest collection of Brazilian birds in the world.





Figure 2 - (Below) Exhibit in the Department of Zoology in the 1940s (MZUSP archives: author unknown). (Above) Temporary exhibition "*Cabeça Dinossauro: o novo titã brasileiro*" (Dinosaur Head: the new Brazilian Titan), 2011.

Since 1954 the MZUSP has been responsible for managing the Biological Station of Boraceia, in the municipality of Salesópolis, where it develops research and teaching activities. Strategic collections linked to research projects funded by Fapesp and CNPq, as well as those generated from environmental impact studies started in the Vanzolini era have become a routine in the institution and to this date account for the rapid increase in the number of specimens kept at the MZUSP.

As a result of the public bid for Infrastructure of Fapesp, the process of restructuring the security and storage systems of our collections is in full swing. The project also entails including the collections in a common database (sophi-Acervo) and providing information about the specimens (specimens of reference that should be analyzed in taxonomic studies) on the Internet. This will result in a much wanted greater agility in studies in our area.

The public exposure of the MZUSP, however, crossed the twentieth century as if it were frozen in time, and only small efforts have been made to update it (Figure 2). Following the museological scenario of the late twentieth century, when the museums undertook their social role as a communication medium, the MZUSP started a new project in museological communication. This was reflected in the reformulation of its organizational chart, with the creation of a Division of Cultural Dissemination (Divisão de Difusão Cultural - DDC) and two associated technical services (service of educational activities and service of Museology). Thus, the MZUSP was decoupling itself from the image of "Research Institute" built from the mid-twentieth century. Technicians were hired to work at the DDC, as well as a professor for a new area of research in Museology of Sciences and Scientific Dissemination.³ In 1998, the long-term exhibit hall began to be remodeled and was reopened in 2002 with a new exhibit that privileged an institutional narrative over the de-contextualized display of taxidermied animals.⁴ A gallery for temporary exhibits was open in 2004 (Figure 2), allowing the museum to boost its communication project.⁵ This strategy has enabled the MZUSP to promote its temporary mobile exhibits, which are now becoming an institutional routine.⁶ In its communication programs the MZUSP seeks to establish a dialogue on Biodiversity with its visitors, showing how it varies in time and space. Always emphasizing the vital importance of the collections to generate information on the topic, the dialogue with the public combines general problems of contemporary societies with heritage preservation.

In our country, the museums seem to have experienced their heydays between the mid-twentieth century and early twentieth-first century. With the creation of the museum policy in 2003, the federal government, through the Ministry of Culture, has launched a series of public policies of incentive and regulation of activities relating to museums. This movement led to the law on the statute of the museums in 2009, and its influence can be felt in several actions implemented since then, such as the creation of several museology courses in our country. We can attribute to this promising moment for Brazilian museums and to the historical struggle of professionals from USP museums, the reform of the statute of the University of São Paulo, as regards the administration of its statutory museums.

The period of incorporation of museums into USP, which brings us to the present days, was not one of institutional bonanza and stability. University museums in general suffered from the lack of a niche of their own in the statutes of the universities that enabled to fully develop their unique activities of studying, preserving and disseminating the material culture inside and outside the University. A critical point in this process was the inclusion of museum researchers in the teaching career, with equal rights and wages (guaranteed by Article 50 of the USP Statute of 1990) and the recognition of curatorship as a didactic activity. The other was the very legal role of Integration Body attributed to the museums since 1988 and the creation of a body to supervise them at the university, namely the Museums Coordination. With the extinction of the Coordination by Resolution No. 5900 of December 2010, the museums achieved their much wanted administrative maturity. The museums are no longer mediated by the Museums Coordination. This certainly will give the USP museums the administrative agility they need to deal with such growth, as is the case of the MZUSP. Today, the statutes and organizational charts of the four statutory museums are being rethought to include this autonomy. But the issue of representation of the museums in the University Council remains unsolved. More than ever, this seems to be but a matter of time.

The main challenges facing the MZUSP include lack of staff (we are still far from recovering our cadres at the level of the former Secretary of Agriculture, which had 24 researchers) and space. Today, our collections invade every inch of free area that can still be found in the Museum. In addition, an exhibit area of about 500 square meters is no match to our communication project. With the project for the Museum Square rescued from the 1990s and approved by the current dean, these problems area bound to be solved. In this project, which involves transferring the MZUSP to the University City, the area of the MZUSP would increase from the current some 6,000 square meters to about 14,00 square meters, excluding the exhibit area. The design of architect Paulo Mendes da Rocha also includes joining the exhibit area of the MZUSP with that of the Museum of Archaeology and Ethnology (MAE) in the same building (cylindrical shape). With its opening scheduled for 2013, the MZUSP and the MAE will be launched in a new era of USP museums. In a new setting, part of the collection of the old Paulista Museum (Natural History) will be put together. Ihering lived the era of specialization; our era is one of interdisciplinarity. We have also benefited from the new status achieved by the disciplines included in Natural History and translated in the current jargon as disciplines related to the study of biodiversity. For this reason, the promised union between the MZUSP and the MAE in a joint exhibit is an opportunity for us to work on themes that interact with human and natural sciences.

We have reached 2011 with 14 professors at the MZUSP who are responsible for the scientific curatorship of its collections, for the Graduate Program in Systematics, Animal Taxonomy and Biodiversity and for the collaboration in creating an inter-unit Graduate Program (alongside the other statutory museums of USP) in Museology. This is the first course in the area in the state of São Paulo, which will meet a growing demand from the current federal policy in the area of museums. By catering to the public, the number of museum visitors is increasing each year (ca. 100,000 in 2010 when the 2 in 1 ticket was implemented in partnership with the Paulista Museum). This number will be multiplied with the systematic implementation of mobile exhibits. The Museum of Zoology of USP therefore enters the twenty-first century updating the initial project of Herman von Ihering with many new achievements, but without neglecting what is essential: excellence in research and in the safeguarding of its assets, in teaching and in communication, with an ever increasing audience.

Notes

- 1 With about 10 million specimens, our collection is a mandatory reference for studying various groups of animals.
- 2 Brazil has about 20 percent of the planet's biodiversity.
- 3 Today, the DDC of the MZUSP has one professor, two technicians (university and high-school levels) in Museology and one university level technician in the educational service.
- 4 The long-term exhibit that has been shown to the public since 2002 with minor changes "*Pesquisa em Zoologia: a biodiversidade sob o olhar do zoólogo*" (Research in Zoology: Biodiversity in the eyes of the zoologist).
- 5 From 2004 to 2011, 11 temporary exhibits were displayed at the MZ. The last three were: "Crise da biodiversidade: a natureza ameaçada"; "Charles Darwin: evolução para todos!"; and "Cabeça Dinossauro: o novo titã brasileiro" (Crisis of biodiversity: Nature threatened; Charles Darwin: Evolution for All!; and Dinosaur Head: the new Brazilian Titan).
- 6 The exhibit "*Moluscos, Joias do mar* (Shellfish, the Jewels of the Sea) is now a mobile exhibit (it will be at the Science and Life Museum of Duque de Caxias, RJ, starting in July) and two others, "*Charles Darwin: evolução para todos!*"; and "Cabeça Dinossauro: o novo tită brasileiro", are preparing to go mobile.

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ABSTRACT – "Traditional" museums have their center of gravity in collections that often precede the institutions themselves. It is the classic model of private collections that meet the public institutional channels and accessibility. The Museum of Zoology of the University of São Paulo is not an exception to this rule. Its collection is linked to collections of the nineteenth century incorporated to the state of São Paulo, in comings and goings of institutional settings to the current status as university museum of excellence in research, teaching and outreach. As such, the MZUSP continues to face challenges and changing needs and to adapt to new realities of the twenty-first century.

KEYWORDS: Natural History Museums, University Museums, Biodiversity.

Maria Isabel Landim is a professor at the Division of Cultural Diffusion of the Museum of Zoology, USP (since December 2008); Board (2011-2013) International Committee for Museum and Collections of Natural History of the International Council of Museums (ICOM Nathist). @ – milandim@USP.br

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